## **Amendments to the Claims**:

This listing of claims will replace all prior versions, and listings of claims in the application:

## **Listing of Claims:**

- 1. (currently amended) An item capture research system, said system comprising:
- (a) an item capture subsystem for capturing information from a plurality of items relating to an electronic transaction, wherein the plurality of items are comprised of on-us items and cash letter items;
- (b) a transaction data archive subsystem for storing the information captured from the plurality of items relating to an electronic transaction for later retrieval, the transaction data archive subsystem having multiple data structures, wherein the multiple data structures of the transaction data archive subsystem are comprised of an on-us items data structure, an all items data structure and a cash letter items data structure[;], wherein the on-us items are items that are drawn on a financial institution capturing the item, and the cash letter items are items that are drawn on a financial institution other than a financial institution capturing the item[;], and wherein the information captured from the on-us items is stored in the on-us items data structure, the information captured from the cash letter items is stored in the cash letter items data structure and the information captured from the on-us items and the cash letter items is stored in the all items data structure;
- (c) said on-us items data structure being further comprised of an on-us items archive file that is stored offline and an on-us items archive index, wherein the on-us items archive index is an index to the on-us items archive file and is stored online:

Appl. No. 09/835,791 Amdt. dated June 22, 2007

Reply to Office Action of December 22, 2006

(d) said all items data structure being further comprised of an all items archive file

that is stored offline and an all items archive index, wherein the all items archive index is

an index to the all items archive file and is stored online;

(e) said cash letter items data structure being further comprised of a cash letter items

archive file that is stored offline and a cash letter items archive index, wherein the cash

letter items archive index is an index to the cash letter items archive file and is stored

online.

2. (original) The system of claim 1, further including an image data archive

subsystem.

6.

3. (original) The system of claim 2, wherein said image data archive subsystem

includes an on-us items image database and a transit items image database.

4. (original) The system of claim 3, wherein said on-us items image database is

comprised of a bank ID number, an account number, and an image date.

5. (original) The system of claim 3, wherein said transit items image database is

comprised of a sorter ID number, an image date, and a sequence number.

(original) The system of claim 3, wherein said image data archive subsystem is

further comprised of a white paper image database.

Appl. No. 09/835,791 Amdt. dated June 22, 2007

Reply to Office Action of December 22, 2006

7. (original) The system of claim 6, wherein said white paper image database is comprised of an account number and an image date.

8. (original) The system of claim 2, wherein said image data archive subsystem is

further comprised of an image data index.

9. (original) The system of claim 8, wherein said image data index is comprised of

an image date, a sorter ID number, a sorter cycle and a sequence number.

10. (original) The system of claim 9, wherein said image data index is further

comprised of a database identifier.

11. (original) The system of claim 1, wherein said item capture subsystem is further

comprised of a document processor.

12. (original) The system of claim 11, wherein said item capture subsystem is further

comprised of an image camera.

13. (original) The system of claim 12, wherein said item capture subsystem is further

comprised of an associator.

14. (original) The system of claim 1, wherein said item capture subsystem is further

comprised of an image camera.

15. (original) The system of claim 14, wherein said item capture subsystem is further comprised of an associator.

## 16. (cancelled)

17. (original) The system of claim 16, wherein the electronic transaction is selected from the group consisting of an ATM transaction, a wire transaction, a phone access transaction, a debit card transaction and an online transaction.

## 18. (cancelled)

- 19. (previously presented) The system of claim 1, further including a research engine for receiving an item request and directing a response to the item request.
- 20. (previously presented) The system of claim 19, wherein said research engine is comprised of a request interpreter, a request director, and a request processor.
- 21. (original) The system of claim 20, wherein said request interpreter is an all items request interpreter and is used to search the all items data structure.
- 22. (original) The system of claim 20, wherein said request interpreter is a cash letter request interpreter and is used to search the cash letter items data structure.

23. (original) The system of claim 20, wherein said request director directs a search

request to the request processor.

24. (original) The system of claim 20, wherein said request processor is an all entries

request processor.

25. (original) The system of claim 20, wherein said request processor is an all items

request processor.

26. (original) The system of claim 20, wherein said request processor is a cash letter

request processor.

27. (original) The system of claim 20, wherein said request processor is a cash letter

items request processor.

28. (previously presented) The system of claim 1, wherein said on-us items data

structure is comprised of an on-us items file.

29. (cancelled)

30. (cancelled)

- 31. (cancelled)
- 32. (cancelled)
- 33. (original) The system of claim 28, wherein said on-us items file is a VSAM file.
- 34. (original) The system of claim 28, wherein said on-us items file is online.
- 35. (cancelled)
- 36. (currently amended) The system of claim [35] 1, wherein said on-us items archive file is comprised of MICR codeline data, a posted amount, a bank ID number, an account number and a posting date.
- 37. (original) The system of claim 36, wherein said MICR codeline data is comprised of a routing/transit number, an account number and a serial number.
- 38. (original) The system of claim 37, wherein said MICR codeline data is further comprised of a process control field.
- 39. (original) The system of claim 36, wherein said on-us items archive file is further comprised of at least one additional data field selected from the group consisting of a sequence number, payee account number, transaction code and import source.

- 40. (currently amended) The system of claim [35] 1, wherein said on-us items archive file is a VSAM file.
  - 41. (cancelled)
- 42. (currently amended) The system of claim [35] 1, wherein said on-us items archive file is stored on magnetic tape.
  - 43. (cancelled)
- 44. (currently amended) The system of claim [43] 1, wherein said on-us items archive index is a VSAM file.
  - 45. (cancelled)
- 46. (currently amended) The system of claim [43] 1, wherein said on-us items archive index is stored on a DASD.
- 47. (previously presented) The system of claim 1, wherein said all items data structure is comprised of an all entries file.
  - 48. (original) The system of claim 47, wherein said all entries file is comprised of a

capture site, a capture date, and an entry number.

49. (original) The system of claim 48, wherein said entry number is further comprised

of block information, the block information being comprised of a block sequence number and a

block amount.

50. (original) The system of claim 49, wherein said block information is further

comprised of batch information, said batch information being comprised of a batch sequence

number and a batch amount.

51. (original) The system of claim 47, wherein said all entries file is a VSAM file.

52. (original) The system of claim 47, wherein said all entries file is online.

53. (original) The system of claim 47, wherein said all entries file is stored on a

DASD.

54. (original) The system of claim 47, wherein said all items data structure is further

comprised of an all items file.

55. (original) The system of claim 54, wherein said all items file is comprised of item

information, said item information being comprised of MICR codeline data, an item amount, and

an item sequence number.

- 56. (original) The system of claim 54, wherein said all items file is a VSAM file.
- 57. (original) The system of claim 54, wherein said all items file is online.
- 58. (original) The system of claim 54, wherein said all items file is stored on a DASD.
  - 59. (cancelled)
- 60. (currently amended) The system of claim [59] 1, wherein said all items archive file is comprised of item information, said item information being comprised of MICR codeline data, an item amount, and an item sequence number.
- 61. (currently amended) The system of claim [59] 1, wherein said all items archive file is a VSAM file.
  - 62. (cancelled)
- 63. (currently amended) The system of claim [59] 1, wherein said all items archive file is stored on magnetic tape.
  - 64. (cancelled)

65. (currently amended) The system of claim [64] 1, wherein said all items archive index is a VSAM file.

66. (cancelled)

67. (currently amended) The system of claim [64] 1, wherein said all items archive index is stored on a DASD.

68. (cancelled)

- 69. (currently amended) The system of claim [68] 1, wherein said cash letter file is comprised of an end point identifier, a cash letter date, a cash letter amount and a cash letter time.
- 70. (currently amended) The system of claim [68]1, wherein said cash letter file is a VSAM file.

71. (cancelled)

- 72. (currently amended) The system of claim [68] 1, wherein said cash letter file is stored on a DASD.
  - 73. (currently amended) The system of claim [68] 1, wherein said cash letter items

Appl. No. 09/835,791

Amdt. dated June 22, 2007

Reply to Office Action of December 22, 2006

data structure is further comprised of a bundle items file.

74. (original) The system of claim 73, wherein said bundle items file is comprised of

at least one bundle, wherein said at least one bundle is comprised of a bundle amount, a bundle

time, and a bundle date.

75. (original) The system of claim 74, wherein said at least one bundle is further

comprised of at least one item, said at least one item being comprised of MICR codeline data and

an item amount.

76. (original) The system of claim 73, wherein said bundle items file is a VSAM file.

77. (original) The system of claim 73, wherein said bundle items file is online.

(original) The system of claim 73, wherein said bundle items file is stored on a

DASD.

78.

79. (original) The system of claim 73, wherein said cash letter items data structure

further includes a bundle items archive file.

80. (original) The system of claim 79, wherein said bundle items archive file is

comprised of at least one bundle, wherein said at least one bundle is comprised of a bundle

amount, a bundle time, and a bundle date.

- 81. (original) The system of claim 80, wherein said at least one bundle is further comprised of at least one item, said at least one item being comprised of MICR codeline data and an item amount.
- 82. (original) The system of claim 79, wherein said bundle items archive file is a VSAM file.
- 83. (original) The system of claim 79, wherein said bundle items archive file is offline.
- 84. (original) The system of claim 79, wherein said bundle items archive file is stored on magnetic tape.
- 85. (original) The system of claim 79, wherein said cash letter items data structure is further comprised of a bundles items archive index, wherein the bundle items archive index is an index to the bundle items archive file.
- 86. (original) The system of claim 85, wherein said bundle items archive index is a VSAM file.
- 87. (original) The system of claim 85, wherein said bundle items archive index is online.

- 88. (original) The system of claim 85, wherein said bundle items archive index is stored on a DASD.
  - 89. (currently amended) An item capture research system, said system comprising:
  - (a) an item capture subsystem;
  - (b) an image archive subsystem; and
  - a transaction data archive subsystem having a multiple data structures, said multiple structures of said transaction data archive subsystem being comprised of:

    (i) an on-us items data structure, said on-us items data structure being further comprised of an on-us items archive file that is stored offline and an on-us items archive index, wherein the on-us items archive index is an index to the on-us items archive file and is stored online, (ii) an all items data structure, said all items data structure being further comprised of an all items archive file that is stored offline and an all items archive index, wherein the all items archive index is an index to the all items archive file and is stored online, and (iii) a cash letter items data structure, said cash letter items data structure being further comprised of a cash letter items archive file that is stored offline and a cash letter items archive index, wherein the cash letter items archive index is an index to the cash letter items archive file and is stored online; and
  - (d) a research engine for receiving an item request and directing a response to the item request;

wherein on-us items are items that are drawn on a financial institution capturing the item,

and cash letter items are items that are drawn on a financial institution other than a financial institution capturing the item.

- 90. (previously presented) The system of claim 1, wherein the on-us items data structure is further comprised of a plurality of credit transactions and a plurality of debit transactions.
- 91. (previously presented) The system of claim 90, wherein each of the plurality of credit transactions and debit transactions is associated with an account number.
- 92. (previously presented) The system of claim 91, wherein each of the plurality of credit transactions and debit transactions is comprised of MICR codeline data, a posted account number, a bank ID number and a posting date.
- 93. (previously presented) The system of claim 92, wherein the MICR codeline data for each of the plurality of credit transactions is comprised of an account number for an associated payee account, an amount and a credit account code.
- 94. (previously presented) The system of claim 93, wherein each of the plurality of credit transactions is associated with one or more corresponding debit transactions, wherein each of the one or more corresponding debit transactions is associated with an account number associated with a payor account.

- 95. (previously presented) The system of claim 94, wherein the MICR codeline data for each of the plurality of credit transactions is further comprised of one or more additional data fields selected from the group consisting of a routing/transit number, a serial number and a process control field.
- 96. (previously presented) The system of claim 94, wherein each of the plurality of credit transactions is further comprised of at least one additional data field selected from the group consisting of a sequence number, transaction code and import source.
- 97. (previously presented) The system of claim 92, wherein the MICR codeline data for each of the plurality of debit transactions is comprised of a routing/transit number, an account number for the associated payor account and an amount.
- 98. (previously presented) The system of claim 97, wherein each of the plurality of debit transactions is associated with a corresponding credit transaction, wherein each of the corresponding credit transactions is associated with an account number associated with a payee account.
- 99. (previously presented) The system of claim 98, wherein the MICR codeline data for each of the plurality of debit transactions is further comprised of at least one additional data field selected from the group consisting of a serial number and a process control field.
  - 100. (previously presented) The system of claim 98, wherein each of the plurality of

Appl. No. 09/835,791

Amdt. dated June 22, 2007

Reply to Office Action of December 22, 2006

debit transactions is further comprised of at least one additional data field selected from the

group consisting of a sequence number, transaction code and import source.

101. (previously presented) The system of claim 1, wherein the all items data structure

is further comprised of a plurality of debit transactions.

102. (previously presented) The system of claim 101, wherein the MICR codeline data

for each of the plurality of debit transactions is comprised of a routing/transit number, an account

number for the associated payor account and an amount.

103. (previously presented) The system of claim 101 wherein each of the plurality of

debit transactions is associated with a corresponding credit transaction, wherein each of the

corresponding credit transactions is associated with an account number associated with a payee

account.

104. (previously presented) The system of claim 103, wherein the MICR codeline data

for each of the plurality of debit transactions is further comprised of at least one additional data

field selected from the group consisting of a serial number and a process control field.

105. (previously presented) The system of claim 103, wherein each of the plurality of

debit transactions is further comprised of at least one additional data field selected from the

group consisting of a sequence number, transaction code and import source.

106. (previously presented) The system of claim 1, wherein the on-us items data

structure is comprised of a plurality of transactions, wherein each of the plurality of transactions

of the on-us items data structure is associated with a corresponding transaction stored in the all

items data structure.

107. (previously presented) The system of claim 1, wherein the cash letter items data

structure is comprised of a plurality of transactions, wherein each of the plurality of transactions

of the cash letter items data structure is associated with a corresponding transaction stored in the

all items data structure.

108. (previously presented) The system of claim 1, wherein each of the plurality of

transactions of the cash letter items data structure is associated with a corresponding transaction

stored in the on-us items data structure.

109. (previously presented) The system of claim 1, further comprising an image data

archive subsystem, wherein the image data archive subsystem is comprised of an on-us items

image database, wherein the on-us items image database is comprised of a plurality of images,

wherein the on-us items data structure is comprised of a plurality of transactions, wherein each of

the plurality of images of the on-us items image database is associated with a corresponding one

of the plurality of transactions of the on-us items data structure.

110. (previously presented) The system of claim 1, further comprising an image data

archive subsystem, wherein the image data archive subsystem is comprised of an on-us items

Appl. No. 09/835,791 Amdt. dated June 22, 2007

Reply to Office Action of December 22, 2006

of the plurality of transactions of the all items data structure.

image database, wherein the on-us items image database is comprised of a plurality of images, wherein the all items data structure is comprised of a plurality of transactions, wherein each of the plurality of images of the on-us items image database is associated with a corresponding one

archive subsystem, wherein the image data archive subsystem is comprised of a transit items image database, wherein the transit items image database is comprised of a plurality of images, wherein the cash letter items data structure is comprised of a plurality of transactions, wherein each of the plurality of images of the transit items image database is associated with a corresponding one of the plurality of transactions of the cash letter items data structure.

archive subsystem, wherein the image data archive subsystem is comprised of a transit items image database, wherein the transit items image database is comprised of a plurality of images, wherein the all items data structure is comprised of a plurality of transactions, wherein each of the plurality of images of the transit items image database is associated with a corresponding one of the plurality of transactions of the all items data structure.